

# **The Cascade Alternative**

**by  
Rinus van de Ven**



## Salton Sea Setting

# Previous Alternatives



**Low Sea**



**Shore Lake**



**North Lake**



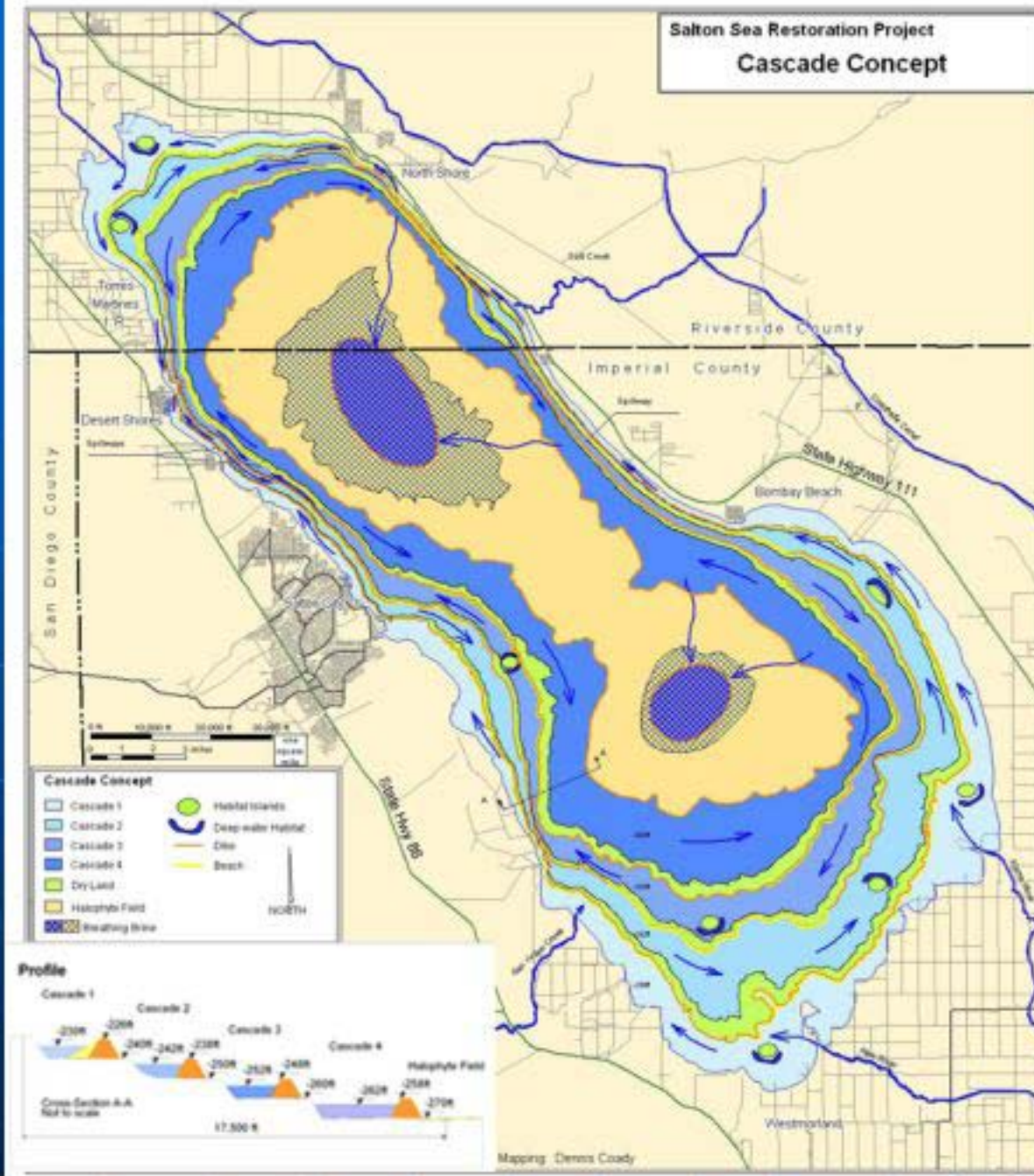
**South Lake**



# Key Project Objectives

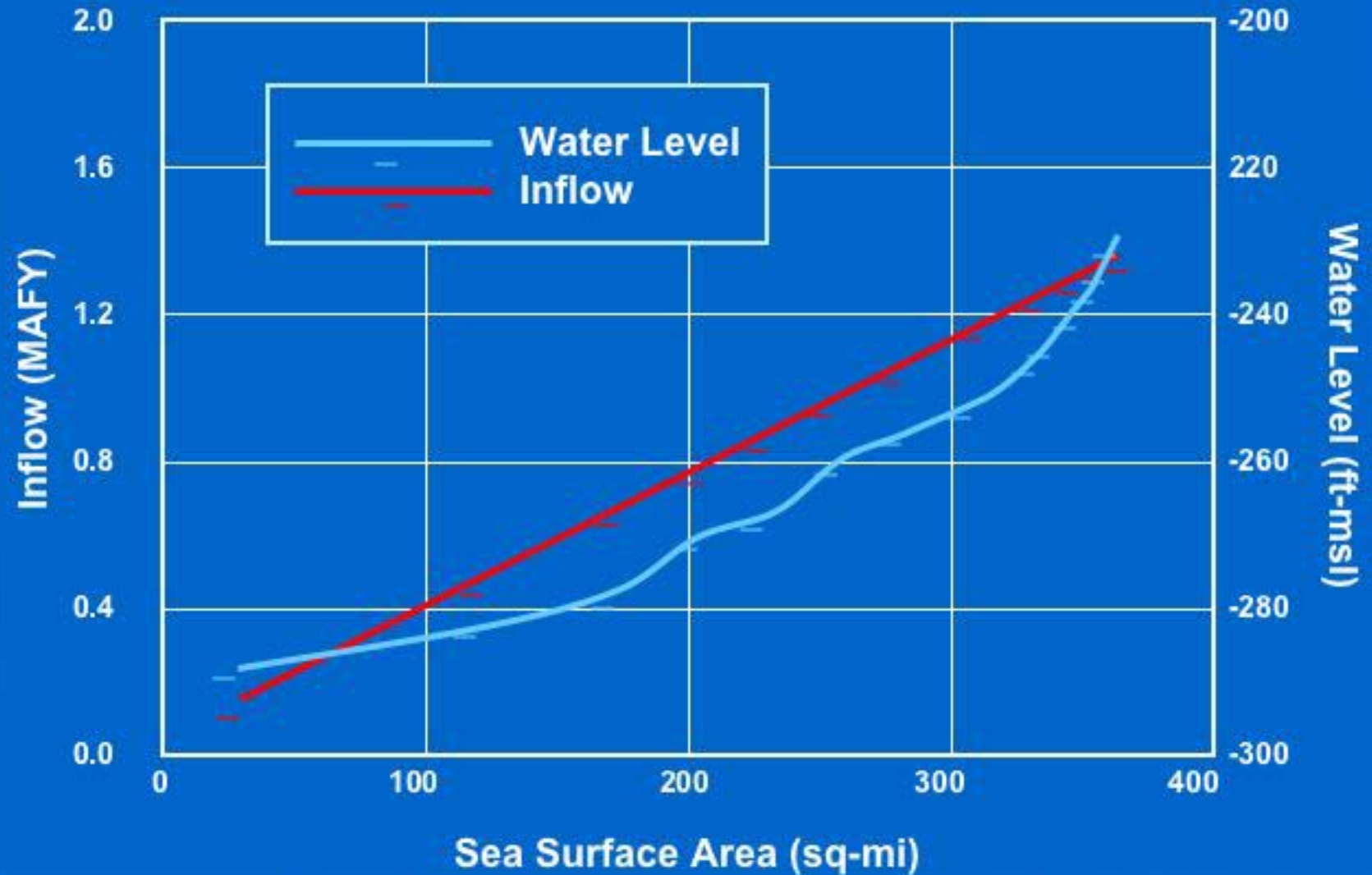
- Water quality and environmental improvement
- Retain water at the existing shoreline
- Flexibility of design
- Optimize use of available water
- Incorporate future recreational values

**Salton Sea Restoration Project**  
**Cascade Concept**

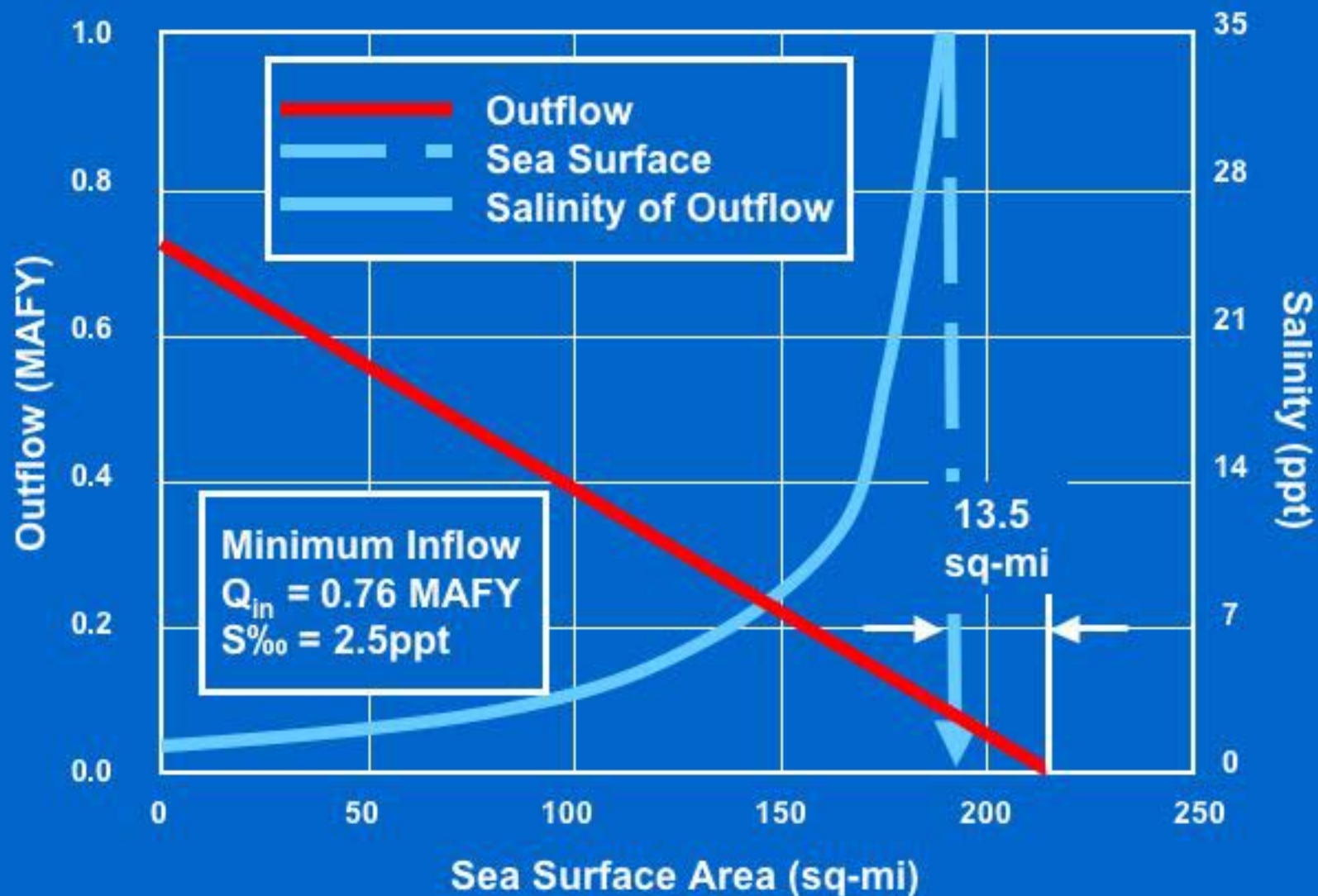




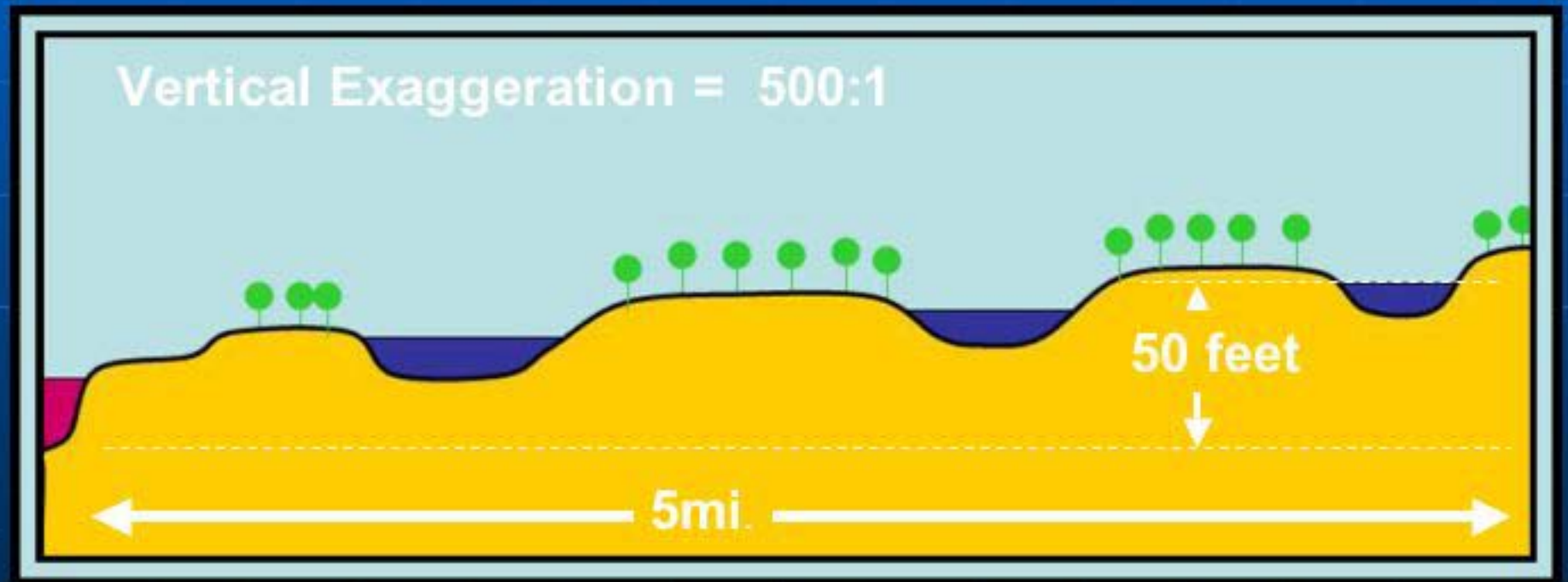
# Inflow/Surface Level Relation



# Outflow/Salinity Relationship



# Schematic Elevation

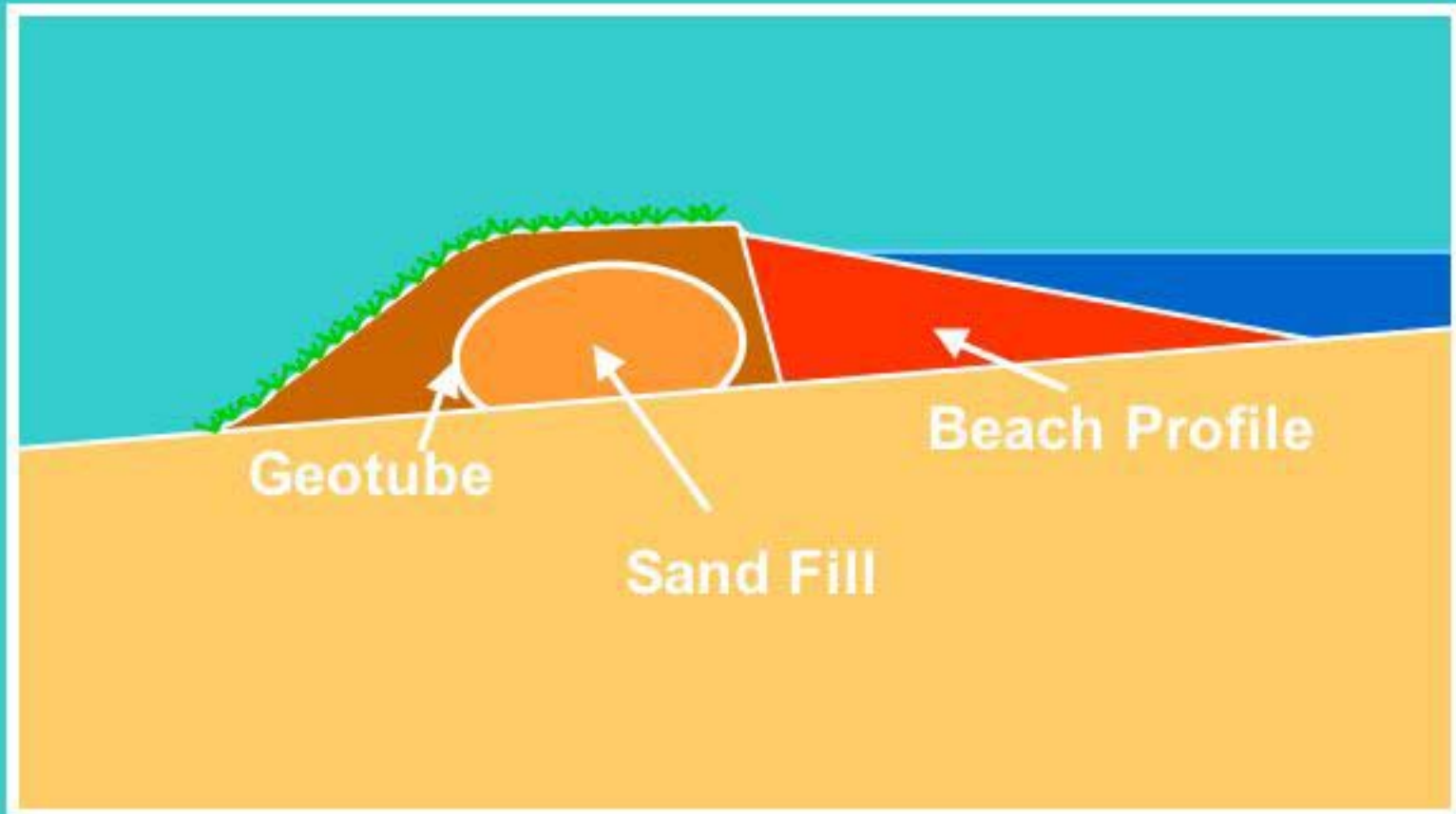




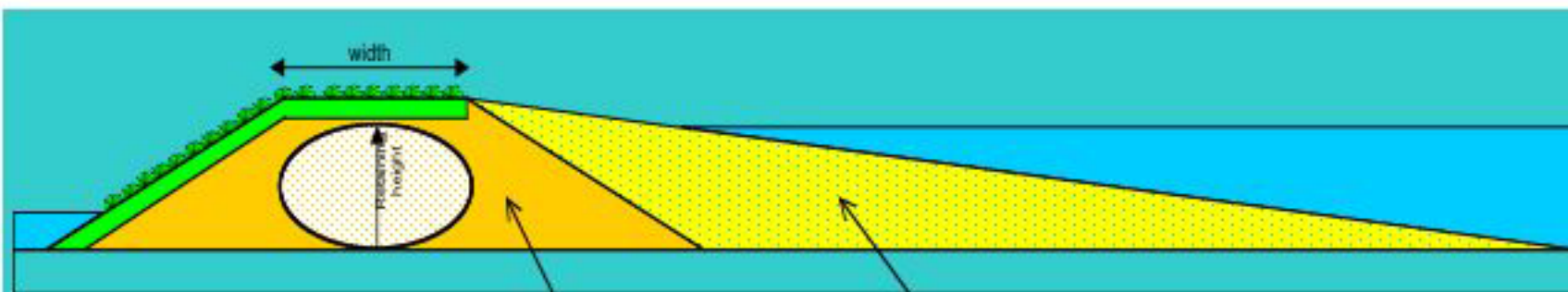
# Geotube Construction



# Typical Cross - Profile



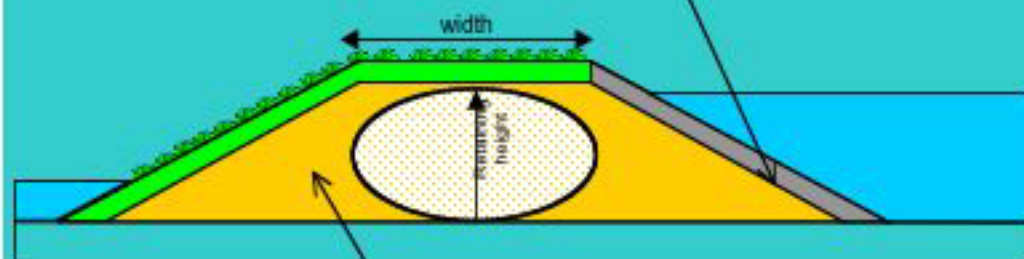
- Broad Crested Dikes with Beach Profile
- Geotubes Filled with Sand as Core of Dike



Protection fill (slope 1:2)

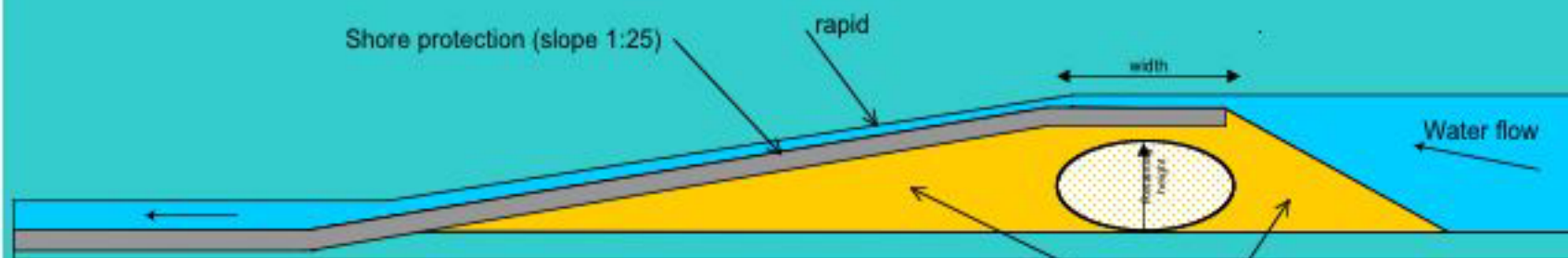
Beach (slope 1:10)

Shore protection (slope 1:2)



Protection fill (slope 1:2)

**Alternate Profiles**



Protection fill (slope 1:2/1:25)



# Salton Sea Restoration Project Cascade Concept

